

Title (en)
METHOD OF COOLING WELDED RAIL SECTION, DEVICE FOR COOLING WELDED RAIL SECTION, AND WELDED RAIL JOINT

Title (de)
VERFAHREN ZUR KÜHLUNG EINES GESCHWEISSTEN SCHIENENABSCHNITTS, VORRICHTUNG ZUR KÜHLUNG EINES GESCHWEISSTEN SCHIENENABSCHNITTS UND GESCHWEISSTER SCHIENENSTOSS

Title (fr)
PROCÉDÉ DE REFROIDISSEMENT D'UNE SECTION DE RAILS SOUDÉS, DISPOSITIF POUR REFROIDIR UNE SECTION DE RAILS SOUDÉS ET JONCTION DE RAILS SOUDÉS

Publication
EP 2415885 A4 20140423 (EN)

Application
EP 10761386 A 20100330

Priority

- JP 2010002303 W 20100330
- JP 2009081587 A 20090330
- JP 2009175646 A 20090728

Abstract (en)
[origin: EP2415885A1] The invention provides a method of cooling a rail weld zone. The method includes a first rail web portion cooling process of cooling a rail web portion cooling region of the rail weld zone in a part of a temperature range until the completion of transformation from austenite to pearlite, a second rail web portion cooling process of cooling the rail web portion cooling region after the entire rail web portion of the rail weld zone is transformed to pearlite, a foot portion cooling process of cooling a foot portion of the rail weld zone, and a head portion cooling process of cooling a head portion of the rail weld zone. When cooling time of the first and second rail web portion cooling processes is t minute, a k value satisfies an expression represented as $-0.1t+0.63\sqrt{k}\sqrt{t}-0.1t+2.33$.

IPC 8 full level
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CPC (source: EP US)
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Citation (search report)

- [XA] GB 2299044 A 19960925 - BRITISH STEEL PLC [GB]
- See references of WO 2010116680A1

Cited by
FR3054153A1; CN112251587A; EP3928910A4; WO2018015649A1; WO2024093182A1

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